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ABSTRACT

A study of the language used in the dialogue journals of beginning students of English as a second language (ESL) focused on the acquisition of English morphology. The study used two methodological approaches: a comparison of journal language with that used in speech and other written samples, and a longitudinal look at change patterns that also examined which morphemes were being acquired and which were not. Four major findings emerged: (1) some morphemes, including the use of "be" as a copula, were mastered quickly, while others showed little or no gain over time; (2) while there were some overall trends common to all students, there was also considerable individual variation in the acquisition processes, seemingly as a result of first language transfer; (3) dialogue journal writing does reflect changes in language proficiency over time, even at the earliest stages of language learning; and (4) ESL learners can compose and express themselves in English long before they have mastered its forms and structures. References, tables, and figures are appended. (MSE)

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DIALOGUE JOURNAL WRITING AND THE ACQUISITION OF ENGLISH GRAMMATICAL MORPHOLOGY

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Dialogue Journal Writing
and the Acquisition of English Grammatical Morphology

Joy Kreeft Peyton

During the past few years, considerable interest has developed in the use of dialogue journals--with native English speakers, with students learning English as a second language (ESL), and with hearing-impaired students, whose exposure to spoken English is limited. A dialogue journal is a bound notebook in which students write regularly (daily, if possible) to a teacher, and the teacher writes back to each student each time they write--not to evaluate the writing in any way, but as an active participant in a written "conversation" that continues throughout the entire school term. Particular characteristics of dialogue journal writing (such as content and amount of writing done) vary according to teacher objectives and types of students involved, but in many classes students are encouraged to write as much as they want about topics of their own choosing. This teacher-developed practice originated with Leslee Reed, a sixth grade teacher in Los Angeles, with native English-speaking students. She began using dialogue journals as a way to communicate regularly with each student about what they were learning. After using them for a number of years, she found them to be invaluable as a source of information about student interests and concerns, as a place where students could write freely and openly about topics that interest them, and as a forum for thinking together about issues and problems confronting the students (Staton, 1980).

A few years ago, Mrs. Reed began teaching in a school in Los Angeles in which 90% of the students were nonnative English speakers. In her sixth-grade class of 26 students, who came from twelve countries and ten language backgrounds, dialogue journal writing became central to her teaching. It provided a way for her to know these students and to assist them in adjusting to their new language and culture, through consistent and supportive interaction

with a member of the culture. It also provided a means for individualizing instruction in a multilingual, multicultural classroom, with students at various levels of English proficiency, and for communicating with students at their level of proficiency.

Besides these social and cultural values of dialogue journals, they also showed promise as a way to promote the language acquisition of ESL students and hence their ability to express themselves in written English. In the dialogue journal, even students at very beginning levels of English proficiency can produce some message on paper, even if in the form of a picture or a few words or sentences, and receive a response. More advanced students can freely write extended text about topics of interest to them, receive consistent feedback about their ideas, and read text written at their reading level. At the same time, manners of written expression and language structures are modeled.

Dialogue journals and language acquisition

Findings from two studies of the dialogue journal writing of native English speakers (Staton, Shuy, Kreeft, and Reed, in press) and students learning ESL (Kreeft, Shuy, Staton, Reed, and Morroy, 1984) indicate that the interaction that occurs in the journals has the potential for promoting second language acquisition, because it has many of the features of conversations between children learning a first language and a caregiver and between second language learners and native speakers of that language in an informal context, i.e., the "set of requirements that should be met by any activity or set of materials aimed at subconscious language acquisition" (Krashen, 1982, pp. 62-76). Krashen (1984) discusses the importance of these conditions in the acquisition of writing, and Staton (1984) and Kreeft Peyton (1986) have applied them to dialogue journal writing:

o The interaction focuses on real topics and issues introduced by and of interest to the learner.

o The focus of the interaction is on meaning rather than on form.

o The language input that the learner receives from reading the teacher's entry is comprehensible, modified roughly to the learner's level of English proficiency, and slightly beyond the learner's productive ability. (See the variation in the teacher's language to five different students in the examples on page 9.)

o The dialogue moves naturally from material that is familiar to the student (e.g., past experiences) or shared with the teacher (e.g., classroom experiences) to the less familiar (e.g., new experiences, new ideas, and future plans).

o The language that occurs in the journals is not grammatically sequenced according to some pre-established plan, but rather the use of grammatical forms and structures evolves naturally in the process of the interaction.

o Rather than overt correction of student errors, correct grammatical forms and structures can be modeled in the course of the interaction. Genuine requests for clarification can remedy breakdowns of communication resulting from errors in form.

o The continuity of the dialogue provides the opportunity to receive more input on a given topic.

o The interaction occurs in private, in a non-threatening, supportive context.

It appears therefore that dialogue journal writing can provide a valuable context for the acquisition of a second language in writing, in a situation similar to the kind of interaction that occurs in speech. This raises a number of interesting research issues. Is there in fact evidence of language acquisition of beginning ESL learners over time in this free, unmonitored writing, and can gains in language facility be plotted, as information for teachers about the progress of their students? If so, what are the acquisition patterns in dialogue journal writing, and how do they parallel patterns of acquisition in

speech already documented in the language acquisition literature? Are acquisition patterns in dialogue journals particular to individual students or uniform among students?

The study reported in this chapter seeks to address these issues by documenting the acquisition of English grammatical morphology as evidenced in the journal writing of beginning ESL learners over ten months' time. Of course, morphology represents only one small aspect of language acquisition, and there are many other avenues that could be pursued in future studies of patterns of acquisition over time in the writing. However, morphology is a good place to start. The frequent and obligatory occurrence of morphemes in native usage makes quantification and hence the investigation of uniformity, variability, and change over time feasible. Also, there already exists a large body of literature on grammatical morphology of learners of English as both a first and a second language, primarily in oral language productions, with which to compare results from this study of writing.

Previous studies of grammatical morphology

The body of research that informs many of the analytical methods used here is the "morpheme studies" of the 1970's. Dulay and Burt (1972, 1973, 1974a, 1974b) conducted the first studies of second language learners and a plethora of studies followed, as researchers sought to discover whether there are universal processes that guide acquisition of English as a second language, regardless of native language background. One approach to this question was to determine whether there was a universal and invariant order for the accurate use of morphemes in required contexts among ESL learners from various language and educational backgrounds, at different ages, and in both spoken and written productions (cf. Kreeft, 1984 for a more extensive review of the morpheme studies and a discussion of the issues raised by them).

The accurate use of a specific morpheme was determined by looking at a context in which it is required and deciding whether or not it is supplied. For example, in the sentence "Yesterday we go to the zoo," past tense is required with go, since the adverb yesterday requires past tense on the verb, but it is not supplied. The morphemes were then ranked in relation to each other, according to the frequency with which they were supplied in required contexts.

Despite many criticisms of the morpheme studies regarding methods of data collection and analysis and interpretations of findings, similar orders were found among ESL learners in nearly all of the studies where subjects were not in a test-like situation, indicating that there are in fact certain universal processes of second language acquisition. Based on these findings Krashen (1977) proposed a "natural" or universal order for morpheme acquisition for children and adult second language learners in free speaking and writing situations, where the focus is primarily on the message and not on form. This order is shown in Figure 1, the boxes representing a descending order of accuracy. That is, in required contexts, progressive -ing, plural, and copula are "acquired" or used before the progressive auxiliary and articles. The order of morphemes within each box is variable.

[Figure 1 about here]

Acquisition of grammatical morphology in dialogue journals

The data

The data for this study of morphological acquisition in the context of student-generated, relatively unmonitored writing come from the dialogue journal writing of two classes of sixth-grade ESL learners in Los Angeles, California. Their teacher, Leslee Reed, is the "original" dialogue journal teacher, as described earlier. The classes are mainstream sixth-grade classes with a few native English speakers, some students who were born in and have had all of their schooling in the United States but who speak a language other than English at home, and a majority of students who have come to the United States from

other countries some time during their school years--anywhere from five years to a few months before entering this class. A regular sixth-grade curriculum is taught, with supplementary ESL classes for new arrivals. Except for math, all subjects are taught by the same teacher. The dialogue journal is a supplementary activity, which students write in during their free time throughout the day. Each morning, they receive their journal with the teacher's response, written the night before.

The following exchange illustrates the nature of the interaction in one student's journal. These entries come from the fifth month of dialogue journal writing between the teacher and Michael, a sixth grade student from Burma, who had been in the United States for just over a year at the time that this interaction was written.

February 9

Michael: Mrs. Reed, you know on this week like the silly week. I don't know what happen on this week. Mrs. Reed, what did you mean about the valentines you said we have to bring the valentines. Did we have to made the valentines for people in our classroom? I dont know what are you talking.

Teacher: No, we don't have to send anyone a valentine. It is just a fun thing to do. Sometimes we like someone but we do not tell them. We feel funny telling someone we really like them. Giving a valentine is an easy way of doing it. If you want to give a valentine or fifty valentines it doesn't matter. You do what you want about that.

February 10

Michael: Mrs. Reed I know what is the valentine but I don't know what I have to do and the valentine is we have to give the cards to someone and I have to buy the cards but I can't buy the cards that is the problem. I think I'm not going to the sofeball becuse I did not do nothing about it and Ricardo said I could be the catcher and he break his primise.

Teacher: No problem! Anyone who wants to give valentines can. If you don't want to give valentines you don't have to.

Talk to Ricardo again! I'm sure he forgot his promise when others on the team began yelling at him.

Did you ever find your pen?

February 11

Michael: I didn't not find my pen. Happy Valentine! I want to give the cards to people but I can't give the cards to people. I give the one card to the simon. I think Level 10 hard me. Did you think Level 10 is hard for me? I saw the Thanksgiving Pilgrim in the book. You know, today morning U Chal put cards in every bag except Tony. I know why U Chal put the cards because he put cards into every bag so that he margar him. You said we are going to do the art with the shoe box, and you said you don't have the shoe box you can't do art.

Teacher: I am not sure what you said. U Chul put cards in everyone's sack so they don't margar him? What word did you put there? Please tell me.
Yes, we will do the shoebox art. Everyone who has a shoebox will do it. Have a happy vacation. I will see you in five days.

This ongoing, daily writing consists of genuine and spontaneous interaction about topics that both the teacher and the students introduce and develop over time. Because the interaction is written, more than one topic can be introduced in a "turn," and topics are continued for a number of turns (e.g., the discussion of valentines) or introduced and dropped (the discussion of Ricardo and softball), depending on student and teacher interests. Both people give information and opinions, ask and answer questions, and request explanations and clarification.

Five students were chosen for the study, from two different classes of 26 students, during the 1980-81 and 1981-82 school years (September to June). Figure 2 gives background information on each student. These particular students were chosen because they were beginning ESL learners, who had been in the United States for less than one year when they began writing in the journals. I was interested in plotting the development of students in the early stages of learning English. The number of students available for study was therefore limited to those who met that condition. There were only four in the 1980-81 class, so I chose Andy from the following year. The students' first languages are Burmese, Italian, and Korean. U Chal is a bit different from the other four. His first and home language was Korean, but he had moved from Korea to

Brazil when he was five and spent seven years in Brazil before coming to the United States. We will see effects of his Portuguese language background in his writing.

[Figure 2 about here]

Based on the teacher's ratings of the students and their scores on the Survey of Essential Skills Test administered near the end of their sixth-grade school year, the students can be divided into three levels of English ability: most proficient, U Chal; medium proficient, Michael and Andy; least proficient, Laura and Su Kyong.

One interaction from each student's journal in the first week of February is shown on the next page, displayed from the most to the least proficient in English. There are striking differences in the five interactions, in terms of topic, style, and language complexity, in both the students' and the teacher's writing. For example, U Chal and the teacher are discussing dolphins, which they were studying in social studies at that time, using relatively complex vocabulary and structure. The teacher responds to Su Kyong's entry, which focuses on more personal topics and is much more difficult to read, using short sentences and simple language and vocabulary.

These texts provide an idea of some of the morphological errors that occur in the writing (for example, missing past in "when I touch the skin," U Chal's entry; missing plural in "you got more stamp," Michael's entry; missing article in "I don't want __dirty journal," Su Kyong's entry).

U Chal: . . . I know and I read that scientist was stunding about dolphins language. Last year when I was in Brazil I was in the beach and I saw a dophin dead on the sand and when I touch the skin is like sofet and then when I eat the lunch and I go to see the dolphin some birds was eating the dolphin.

Teacher: The dolphins have even been trained to do undersea work for the Navy. They seem to have an intelligence. The birds help to clean the beach by eating the dead animals. The dolphin's skin has no scales--we expect an animal that looks like a fish to have scales. . . .

Michael: You know yesterday after school I give the Lisa many stamp and Jenny said "what did give her for" and I said beause she does't have the stamps so I have more so I want to give her the stamp and you got more stamp so I don't have to give you the stamp." Mrs. K if they mark on the wall how much they have to pay the school. You know yesturday I got to go the hospital and the nurse said I have to drink the 4 box pail and I got the second box and at my 6 I have to go again.

Teacher: I'm glad you went to the hospital. It is important that you take the boxes of pills so you will stay well. When you have taken all 4 boxes, then you may be all well and not have to take more pills. . . .

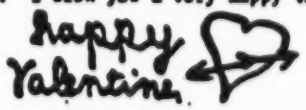
Andy: Today I am happy, because give me "New Journal". I like "New Journal". I in picture name is "Korea bird and Korea dragon and sun". I am happy. My mom come here 3 day. I am happy. My mom give to me present. "Make toy". "Stamps" Korea book (cartoon) and other is give to me. I am happy happy. "Faster come here mom please." Today I am second came to school. "Oh, No". O. K. Tomorrow I am first. "No more". only I am happy^{1} + happy^{2} happy^{3} = happy^{9}. See you tomorrow. bye

Teacher: Your Mother will be happy to see you! You can tell your Mother you are learning to speak and to write more English every day.

You were at school before I was today. Thursday we will go back outside before school because Mrs. Reed has to go out to watch all of the students.

We learned about the cold Arctic Biome. Would you like to live there?

Laura: Dear mrs Reed I like the red hart is ruely nice I hope yuv like my. the fish was very good. Mrs. C- said I am going in 6 level I am ruealy happy. Simon go to. I wish yuv a very happy Valentine to yuv and your asmont.



Teacher: I love your valentine. It is so beautiful. The red name and the red heart are so pretty. I like it so much because you made it for me! Thank you. It is one of my favorite valentines.

I hope your weekend is fun and you come back on Tuesday ready to go to level 6!

Su Kyong: today I looke the jernol is doly if I do the nov jernol and if this jernol is doly my her is not clyn if I do the my nov jernol I dont wont doly jernol and today moning sandra is mad me oumus shes borsday I have to got the pljons is her borsday

Teacher: Can you make a big, big birthday card for Sandra's birthday? She would like that.

I see your word study list in your journal. I am happy you are studying it.

If you keep writing you will get a new journal.

Students' writing in the journals.

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Analysis

I chose to examine the acquisition of six verb-related and four noun-related morphemes in the journals:

Verb-related morphemes	
Regular past	He played in the street.
Irregular past	He saw the school.
Progressive -ing	He is playing in the street.
Progressive BE	He is playing in the street.
Copula BE	He is a good student.
Third person singular, present tense	John likes school.
Noun-related morphemes	
Regular plural	They are good students.
Possessive -'s	We went to Mary's house.
Definite article the	The teacher has a book.
Indefinite article a	

These particular morphemes were chosen because when I read through the journals, they stood out as part of the developing language competence of these students. Most were used sporadically or not at all initially, but their frequency increased noticeably in the course of the year. One example of such change is the difference in past tense marking in the following two narratives from Michael's journal. In October he rarely marks past tense (once in this entry). In the May entry all of the verbs referring to past actions are marked for tense (verbs that should be marked for past are underlined).

Oct. 3

> Mrs. Reed, Today I go to math class Mrs. G- give test so I mest 3 and 1/2 not finish becuse time is up. I mean she give the 5. So I finish 2 1/2. She give the math test is easy Mrs. Reed.

May 14

> Yesterday I want home my mother told me to study the Language that you gave me to study I did study it . . .

As mentioned earlier, the acquisition of these morphemes in the speech of first and second language learners has been well documented, providing a basis for comparison with these written data.

The research questions that guided the analysis, designed to address the issues raised above, are the following:

1. Are patterns of morpheme use in the journals similar to patterns found in previous studies of morpheme acquisition?

2. Are patterns of acquisition similar among the students?

3. Is there evidence of increased proficiency over time in the use of these morphemes in the dialogue journal writing of beginning ESL students?

To address Question #1, I utilized methods used in previous morpheme studies that looked at suppliance of morphemes in obligatory contexts. I divided the ten months of writing into three sample periods--fall, winter, and spring--of twenty interactions each (about four weeks' writing for each sample), and analyzed for each sample the presence of the selected morphemes in the contexts that the students themselves had created in their own writing, treating each context "as a kind of test item which the [student] passes by supplying the required morpheme or fails by supplying none . . ." (Brown, 1973). A morpheme was considered supplied whether or not its form was correct. For example, in a sentence like, "They is going," the progressive auxiliary BE is considered supplied.

Results of this analysis are shown in Table 1. A minimum of five contexts for the occurrence of a given morpheme for each student was set. Where there were fewer than five contexts, that morpheme was excluded from the analysis. Thus, in some cases there are gaps in the table--for example, for possessive, in the winter sample, for U Chal, Laura, and Su Kyong. This does not mean that no potential instances for use of the morpheme were found, but that there were fewer than five (use of the morphemes, whether or not there are five instances, is discussed later, in the longitudinal analysis).

After each context for a morpheme was scored as: morpheme supplied (1 point) or morpheme not supplied (0 points), the total number of times the morpheme was supplied was divided by the total number of contexts in which it should have been supplied, for an individual performance score, expressed as a percentage. Scores for the five students as a group were summed in two ways--the Group Score is the sum of the individual ratios and the Group Mean is the sum of the individual percentages derived from the ratios (following Dulay and Burt, 1974a, except that to obtain a Group Score, they included all subjects in the calculation, even if there was only one obligatory occasion for the use of a particular morpheme by that subject. Here, a minimum limit of at least five obligatory occasions for a morpheme to occur was imposed). You will notice that while the definite article the and indefinite article a appear separately in the list of morphemes to be studied (page 10), they are grouped in Table 1 under the general category, Articles. This is because this grouping is done in the studies used for comparison. We will look in more detail later at patterns for use of articles.

[Table 1 about here]

Once group performance scores are obtained, they can be ranked from highest to lowest, based either on the Group Score or the Group Mean. Since there is little difference in rank orders by the two methods of calculation and since it is the Group Score that is reported in most rank order studies, this score is used to rank the morphemes here. This ranking is shown in Table 2.

[Table 2 here]

The rank orders are nearly identical in the winter and spring samples. Only the past regular and third singular exchange ranks in the spring, and these scores are based on very low numbers for each student, with no scores for some

of the students on these morphemes. The similarity in rank orders among the three sample periods is reflected in a significant rank order correlation, as shown in Table 3. In the fall there are several differences in the rank ordering, but orders are still similar to those in the winter and spring, shown by a rank order correlation significant at the .05 level.

[Table 3 here]

Since an adequate number of instances of morpheme occurrence is available for most of the students in the spring, this sample was chosen for comparison with four studies of the morpheme production of adult ESL learners--in speech elicited by means of an instrument (the Bilingual Syntax Measure [Bailey, Madden, and Krashen, 1974]); in free speech (Krashen, et al., 1977); in compositions written quickly and not edited (Houck, Robertson, and Krashen, 1978); and in the same compositions, edited (Houck, et al., 1978)--and with Krashen's "natural order" (treating the morphemes as if they ranked in linear fashion). Table 4 shows the group rank orders along with group performance scores in each of the studies.

[Table 4 here]

Rank order correlations between the results in each study and this study show that group rank orders are similar, as shown in Table 5.

[Table 5 here]

So far, we have found that rank orders for use of selected morphemes, when results from the five students are grouped, are similar among the three sample periods of this study. Rank orders found in this study are similar to those found in others, using both spoken and written data.

Question #2 investigates whether the rank orders are similar among the individual students in this study. Following Andersen (1977, 1978), I used an

implicational scale to compare morpheme ranks for individual students both with each other and with the group ranks (Table 6). The morphemes are ranked on the left roughly according to the Group Mean. Where a morpheme for a student deviates from the group rank order, it is placed in parentheses. There are few such deviations. The best scale follows the Group Mean rank orders almost exactly, except that in the fall the ranks for articles and plural are switched, and in the spring the ranks for past irregular and plural are switched (these are marked with]). In both cases, the mean scores for the two morphemes are very close.

[Table 6 here]

Although there are some deviations in each period, there is a great deal of similarity between group and individual ranks and among the individual students. To demonstrate this, I calculated a "coefficient of reproducibility,"[1] first used by Guttman (1944) in variation studies and suggested by Andersen (1978) as a way to investigate variation in language acquisition studies. The coefficient of reproducibility for each implicational scale is as follows:

Fall = 78.8%; Winter = 87.8%; Spring = 82.9%.

Although Nie, et al. (1975) consider 90 percent or above a valid scale, Guttman points out that 85 percent is generally considered a sufficiently predictable scale. Thus, the scale for the winter sample can be considered valid and the spring sample is very close.

To summarize the analysis so far, the methods used in previous morpheme studies have been employed here to determine rank orders for morpheme use in required contexts for five students from four different language backgrounds--2 Koreans, 1 Burmese, 1 Italian, and 1 Korean with Portuguese as a second language. We have seen that orders for these five students as a group and as individuals are similar to orders found in those studies.

What has this analysis shown us? First, it has demonstrated that a quantitative study of grammatical features can be conducted on dialogue journal data, even with very beginning ESL learners. Before the analysis was begun, it was not clear that the students' writing would allow such determinations. Early in the year, the students' entries were short, handwriting was often difficult to read, and passages were ambiguous in terms of contexts for morphemes. Later in the year students wrote more, and the writing became much clearer and easier to work with.

Second, methods of analysis similar to those used in previous morpheme studies reveal patterns of morpheme use in dialogue journals similar to those in other relatively unmonitored productions, both spoken and written. That is, certain morphemes--progressive auxiliary, progressive -ing, and copula--are used much more frequently by most students where required than others like possessive and third person singular -s and past regular -ed. This gives a rough indication of grammatical patterns that can be expected in the dialogue journal writing of beginning ESL learners. If we were to stop the analysis here, we would be left with the conclusion that these data confirm universal processes of language acquisition, regardless of first language background.

However, the methodology used so far has provided a general starting point for a more detailed longitudinal analysis, in which a great deal of individual variation becomes evident. What follows is a discussion of acquisition patterns in the journals of individual students over the three sample periods, in order to address Question #3. In this part of the study all morphemes are included, whether or not there are five contexts for their occurrence. The first thing that is evident here is that the analytical method used greatly affects acquisition patterns that are found. Therefore, this discussion will focus not only on patterns of change over time in the use of the morphemes, but also on matters of methodology. Figure 3 shows the individual students' use of the four noun-related morphemes, the, a, plural and possessive -'s, in required contexts in

the three sample periods. Patterns for use of Plural come from percentages shown in Table 1. Tokens and percentages, not shown for the and a separately in Table 1, are shown below in Table 7. Since instances of possessive -'s are generally so few (except for Andy's journal), results are shown in Figure 3 as fractions rather than as percentages.

Several patterns in these charts are worth noting. Plurals start out high in comparison with the other morphemes in the fall and then decrease in use for most students, with only U Chal showing improvement over time in the use of plural -s. By the end of the year, their use is clearly not mastered by anyone except possibly U Chal.

[Table 7 here]

[Figure 3 here]

The use of articles shows an interesting pattern. Although articles are treated as a single category in many of the morpheme studies, some researchers who have separated them into definite and indefinite categories have found that they demonstrate very different patterns of acquisition for second language learners (Andersen, 1977; Hakuta, 1976; Rosansky, 1976). The patterns of article use in the dialogue journals confirm these findings. In the earlier analysis, in which articles are treated as a single category, they rank quite high (after progressive auxiliary and -ing and copula). When they are separated into definite and indefinite categories, however, they demonstrate very different patterns of use. Definite article the is used correctly considerably more frequently than indefinite a by all students, except for U Chal and Laura in the spring, where they have mastered the use of both. Andersen (1977), Dulay and Burt (1975), Hakuta and Cancino (1977), Kessler and Idar (1979), and Rosansky (1976) argue that patterns of article acquisition reflect transfer from the learner's native language. The dialogue journal data seem to confirm this. Laura and U Chal, whose previous languages (Italian and

Portuguese respectively) have articles, supply both the and a in obligatory contexts very quickly and reach 100% accuracy on both by the end of the year (it is important to emphasize previous rather than first language here because, as will be recalled, U Chal's first language is actually Korean and his second language, Portuguese). However, Su Kyong, Andy, and Michael, whose previous languages (Korean and Burmese) have no articles, never reach 90% accuracy. Use of a remains far behind the throughout the year, and Michael's and Andy's scores for use of a decrease over time.

Many second language researchers (Andersen, 1977; Hakuta, 1976; Lightbown, Spada, and Wallace, 1978; and Pica, 1983, among others) argue that in the study of morpheme acquisition it is not enough to consider only the suppliance of morphemes in obligatory contexts. For many learners, numerous instances can be found of overgeneralization to inappropriate contexts, and it is therefore misleading to state that a morpheme has been "acquired" when its function has not been mastered. This is certainly the case with the use of articles in the dialogue journals. Along with learning to use the correct article when one is required, these students are also learning not to use articles where none is required. For Michael, Andy, and Su Kyong, overgeneralization[2] of articles is almost as frequent as their omission, and in their journals we find sentences like:

I have two sisters at the Burma.

You know what happen to the some of the people.

I saw the many game.

In order to determine each student's total control of the function of articles (rather than simply use in obligatory contexts), I followed the method used by Hakuta (1976) to calculate mastery of the use of a morpheme, the percentage of times it is used in appropriate contexts. The number of times the article appears in correct contexts is divided by the total number of times it is used,

both correctly and overgeneralized to inappropriate contexts. This is shown in Figure 4.

[Figure 4 here]

The development of appropriate article use is not at all uniform among students and, like the use of articles in obligatory contexts, variation appears to reflect first-language transfer. While U Chal and Laura show consistently high scores for both definite and indefinite articles in appropriate contexts, Su Kyong's, Michael's, and Andy's scores remain quite low, again with a lagging behind the. Again, Michael's and Andy's appropriate use of a fluctuates over time.

Use of possessive -'s also seems to reflect transfer from the students' first language. Contexts for its occurrence are very few in most of the journals, but from the little data available we can see that the two students who supply -'s the most frequently are Su Kyong and Andy, the Korean students. Korean has a possessive suffix on the possessor noun (Su Kyong-e chek = "Su Kyong's book"). Although this suffix is rarely used in casual conversation in Korean, they have picked it up quickly in English. Andy not only uses -'s in obligatory contexts with high frequency, even writing things like, "Today is one's great great grandfather die day" and, "stick to one's own opinion," but he overgeneralizes the form to many other situations, as if he is applying a rule that whenever two nouns occur together, the first one must have -'s, as in the following two examples:

> Friday I am lend Sompob's money.
>
> Today in the morning my kindergarten's sign is finish.

Hakuta (1976) found a pattern for possessive marking in the speech of his Japanese subject, Uguisu, similar to the one I found in Andy's journal. While Uguisu marked plurals very infrequently, she reached 90 percent accuracy with

the use of possessive -'s and overgeneralized the form to possessive pronouns (he's, they's) as well. Hakuta suggests that this could be a result of Japanese influence--in Japanese a postposed particle no appears in the same position as the -'s.

Even though Michael frequently uses possessive noun phrases, he writes the possessive suffix only once during the entire year. Frequently he uses long possessive noun phrases, either omitting the -'s or using a possessive pronoun:

. . . my mother big sister son . . .

. . . my father his brother wife . . .

. . . my father brother wife her daughter . . .

Burmese has a possessive particle that follows the possessor noun (Maung Ba ye saou = "Maung Ba's book"). Since this particle constitutes a separate syllable, it may be that Michael fails to notice the possessive suffix -'s in English. At the same time, as two of the examples above indicate, he may have transferred the function of ye as a marker of possession to the English possessive pronoun. Therefore, he might write something like, "Maung Ba her (for ye) book" rather than, "Maung Ba's book."

In this longitudinal analysis of change over time in the use of the noun-related morphemes, we have seen no improvement in plural marking. The articles the and a show very different patterns of acquisition, with correct use of a lagging far behind use of the. There are also strong indications that article use and overgeneralization and the use of possessive -'s reflect first language transfer, a pattern that did not appear in the previous analysis. It seems very clear that while certain trends can be identified across students, individual variation due to first language transfer can in no way be discounted.

Now we turn to the verb-related morphemes. Figure 5 shows the individual students' use of these morphemes in required contexts in the three sample periods.[3] (The placement of progressive auxiliary and -ing together, AUX and

ING on the chart, will be explained below.) Here patterns of acquisition among individual students are more uniform. Copula is used nearly all of the time throughout the year by all five students,[4] while third singular -s and regular past -ed are rarely used by any of them, and there is little or not improvement over time. There is an increase over time in the use of irregular past in all of the journals, and especially in U Chal's and Laura's, who reach over 90% accuracy in the spring. There is an increase in all of the journals except Su Kyong's in the use of progressive auxiliary be and -ing with verbs in appropriate contexts.

[Figure 5 here]

Some interesting issues arise when we take a close look at forms used by the students to express the progressive, which requires the grammatical morphemes auxiliary be and -ing. In the previous analysis it appeared that -ing was used more frequently by all of the students than the auxiliary in contexts for the progressive during the three sample periods (Table 6). This pattern is shown in Figure 6 for the five students as a group. In this analysis, all BE + Verb ("She is go") constructions that were ambiguous as to whether or not they were progressive were excluded, following the methodology used in most morpheme studies. Lightbown (1983), for example, "counted as obligatory contexts for -ing all obligatory contexts for the progressive, whether or not the auxiliary was supplied...based on [the] assumption that -ing added to the main verb is the more salient and essential marker of the progressive..." (p. 226). Then she counted "as obligatory contexts for the auxiliary only utterances containing a verb with -ing inflection" (p. 226). Therefore, constructions such as "She's blow the candle," in which be but not -ing is supplied, were not considered as possible progressive constructions. There is good reason for this decision. In such constructions, where there is no -ing on the verb, it is often

impossible to determine whether the construction is an attempt at forming the progressive or simply an overgeneralization of be.

[Figure 6 here]

The problem with using this analytical approach with the dialogue journal writing in this study is that it obscures a lot of the data, in which there are many BE + Verb constructions without the -ing inflection, as in the examples shown below. Some (1-3) are clearly progressives; others (4 & 5) are clearly not progressives. Most (6 & 7) are ambiguous--they could be either progressives or simple present or past tense constructions.

Progressive

1. and so I told him I am go now.
   [. . . I'm going now.]

2. I'm go to finish my homework.
   [I'm going to finish . . .]

3. today Sandra going to my home and I'm got the Sandras home.
   [I'm going to Sandra's home.]

Progressive not possible

4. Yesterday night is telephone message the my grandmother is die that is bad message and sad message.
   (The rest of the context makes it clear that his grandmother had died.)

5. today lunch time Im no like lunch but I'm hungry . . .
   [I didn't like the lunch.]

Ambiguous - progressive or simple present/past?

6. Sunday raining and Monday is raining but today is not raining but sun is come . . .
   [The sun is coming out/came out.]

7. I am get in a diet because am fatt. Leticia is watching every thing I eat and I hope I can be skinny because is good.
   [I am going on a diet/I am on a diet]

If all BE + Verb constructions that are clearly progressive (1-3 above) as well as those that are ambiguous (6 & 7) are included in counts of use of

progressive auxiliary and -ing, a much different pattern appears from that shown in Figure 6. In this pattern, shown in Figure 7, -ing appears far less frequently than the auxiliary in the fall, and slightly more frequently only in the spring. An a priori decision to count as a context for the auxiliary only verbs already marked with -ing inflection excludes from consideration the possibility that some ESL learners may use the auxiliary to mark the progressive before they use -ing. This appears to be the case in some of these students' dialogue journals (and Andersen, 1977, found a similar pattern in the written compositions of ESL college students).

[Figure 7 here]

Andersen (1977) suggests an alternative method for analyzing the incipient stages of progressive formation. He argues that rather than treating auxiliary be and -ing as separately occurring morphemes, as has been done in most morpheme studies and so far in this one, it is more informative to note the occurrence of all of the possible forms used by ESL learners to express the progressive. Figure 8 shows the results of this analysis in the dialogue journal data. Three verb forms are used in contexts in which it is possible that students are expressing the progressive: AUX + Verb + ING ("I am going"), Verb + ING ("I going"), and AUX + Verb ("I am go"—this includes ambiguous AUX + Verb constructions). (In the fall, U Chal also uses constructions with the verb alone, such as "I go to do." Since this construction is limited to U Chal, in the fall only, it is not included in the figure.) The frequency of use of each construction is expressed as a percentage. What we see here is that, rather than using Verb + ING without AUX to express the progressive, which is the pattern found in most morpheme studies and in the earlier analysis in this this one, early in the year some students seem to use AUX + Verb instead. As time passes, they learn not to use AUX + Verb alone and to use AUX + Verb + ING, a process that was obscured earlier.

[Figure 8 here]

When we look at the progressive constructions of individual students, we again find variation that seems to be due to first language transfer (overall patterns of use of AUX and ING by individual students are shown in Figure 5, but cf. Kreeft 1984 for more extensive discussion of individual variation in the formation of the progressive). Neither Laura nor U Chal, with Romance language backgrounds, ever use the AUX + Verb construction in contexts for the progressive, while Su Kyong, Andy, and Michael again have patterns similar to each other--using AUX + Verb first, with AUX + Verb + ING appearing later.

Conclusions

I have taken two analytical approaches to the study of morpheme acquisition of beginning ESL learners during eight months' time, as reflected in their dialogue journal writing. In the first, I utilized methods employed in most previous morpheme studies, which are primarily cross-sectional, in order to compare acquisition patterns in dialogue journal data with speech and other written data. I found considerable uniformity in acquisition orders between this study and others and among the individual students in this study, indicating universal patterns of acquisition. In the second, I took a more longitudinal approach, to look at patterns of change over time and to investigate which morphemes were being acquired and which were not. In this more detailed analysis--which involved looking at overgeneralizations of morphemes as well as their use in obligatory contexts, separating definite and indefinite articles rather than grouping them under a single category, and looking at progressive auxiliary and -ing together rather than as separately occurring morphemes--I found interesting patterns of acquisition, and while there were certainly trends common among students, there was also a great deal of individual variation that was obscured in the first approach.

Although the number of students involved in this study is admittedly very small, we can nonetheless draw some conclusions from these findings, make some

predictions about what we might expect in the dialogue journal writing of other beginning ESL learners, and suggest some implications for classroom practice.

The first set of conclusions and implications has to do with patterns of change over time in the use of grammatical morphology in the journals. These students had very little trouble with the use of BE as copula, even at the beginning of the year, and showed rapid mastery. For most of the students, there were substantial gains in the correct use of the progressive auxiliary and -ing and the past tense marking of irregular verbs, and U Chal and Laura reached mastery on all of them by the end of the year. At the same time, there was little or no gain in the past tense marking of regular verbs, and in the use of plural and third singular -s. Only Andy showed considerable gain in the use of possessive -'s. While U Chal and Laura mastered the use of the articles, the other three students showed little improvement in their use.

Why these gains with some morphemes and not with others? Various reasons have been proposed for morpheme acquisition orders in oral language, including semantic and syntactic complexity (Brown, 1973; deVilliers & deVilliers, 1973), frequency of occurrence in the input to the learner (Larsen-Freeman, 1975, 1976; Long, 1981; Hoerk, 1980), and perceptual salience of the morpheme (Hakuta, 1976; Labov, 1969; Slobin, 1971). Hakuta argues that in speech "overtly marked" forms, in which the inflection takes the form of a new syllable (such as irregular past, progressive -ing, prepositions and articles) are acquired earlier. These forms "penetrate the attention of the learner. If the learner is motivated to make his production match what is heard in the input, these forms are the first to be acquired, because they are salient to the learner" (1976, p. 336). Other forms with nonsyllabic markings, such as possessive, plural and third person singular -s, and past regular are more difficult to decipher in the input and less likely to be noticed.

The dialogue journal data seem to indicate that in writing, as in speech, morphemes that are syllabic (as are copula and progressive be when uncontracted;

progressive -ing; and past irregular, as in "He went") tend to be acquired more quickly, and therefore may be more salient to the learner. Perceptual salience is a slippery concept and is not always tied to syllabicity. Copula and progressive be are often contracted and therefore not always syllabic. Andy quickly picked up on the use of progress 's, which is not syllabic. However, syllabicity does seem to be playing a role here.

When rules for the use of syllabic morphemes are easily learned (which is the case for copula and the progressive morphemes) or require the learning of a new word (with past irregular verbs), it may be that they can be acquired in a naturalistic, communicative context. (And Pica, 1982, 1983 found that explicit instruction in progressive -ing, an easily learned rule, resulted in students' not only using it consistently in required contexts, but also overgeneralizing it to contexts in which it was not required.) When rules for syllabic morphemes are difficult to learn (which is the case for articles), naturalistic acquisition, or at least their use in naturalistic communication, does not seem to occur as quickly. Laura and U Chal did master article use, but they could transfer rules for article use in Italian and Portuguese to English. The other students had more trouble with articles.

Morphemes that tend not to be syllabic (plural, in "two girls"; possessive, in "John's shoes"; regular past, in "she seemed smart") are acquired more slowly. It may be that these morphemes will simply not be used by ESL learners in communicative, relatively unmonitored writing contexts, even though their rules are easily taught and learned, and they have been taught and drilled extensively in class (as they had been in this class). Getting students to use articles and non-syllabic morphemes correctly in their writing may require teaching them methods for carefully editing pieces they have written. There is evidence (cf. Pica, 1984) that direct instruction does accelerate the accurate use of easy-to-learn morphemes such as third singular -s. Pica does not, however, specify the conditions under which they are produced. What we have

seen in these data is that this knowledge, if in fact these particular students display it in other writing, has not yet been transferred to their dialogue journal writing.

Second, while there are some overall trends common across students, there is also considerable individual variation in their acquisition processes, which seems to be a result of first language transfer. Therefore, as Gass and Selinker (1983) argue,

> it is indeed possible and not incompatible to view second language acquisition as both (1) a process of hypothesis testing in which learners create knowledge from the second language data they have available to them while at the same time viewing it as (2) a process of utilizing first language knowledge as well as knowledge of other languages known to the learners in the creation of a learner language. (p. 7)

Language universals and natural orders of morpheme acquisition notwithstanding, we do not want the search for and belief in universal processes to blind us to the richness of individual variation that is also present, to the extent that we develop inappropriate and self-defeating expectations of our students. We will simply frustrate ourselves and do our students a great disservice if we expect them all to perform alike.

Third, we have found that dialogue journal writing does reflect changes in students' language proficiency over time, even at the earliest stages of second language acquisition. We were able to quantify and plot this growth for each student, including the least proficient in English. Although this particular study does not investigate this issue, it may be that the dialogue journal writing not only reflects but also facilitates that growth. This possibility is certainly supported by the qualities of the writing, those considered optimal for first and second language acquisition, as outlined in the beginning of this chapter.

It is clear that dialogue journal writing can serve as a valuable resource for teachers, enabling them to follow their students' progress in extended writing that is student generated, written for purposes other than evaluation, and relatively unmonitored. From reading student entries, teachers can find out a great deal not only about their students as human beings, but also about what they are learning, where they might be having trouble, and where future lessons might focus. Although we have looked only at the acquisition of morphology in this study, the writing yields a wealth of information about each student's progress, from the smallest features of the language all the way up to discourse and interaction patterns.

Finally, from the various examples of text shown throughout the chapter, it is clear that ESL learners can compose and express themselves in English long before they have mastered its forms and structures. Even at the beginning of the year, when morphology was at the earliest stages of development, these students were busy writing and reading meaningful text in their journals. As the year progressed they wrote narratives, described events and problems, and argued their points of view. In the meantime, language forms and structures continued to develop.

Notes

[1] The formula for calculating a coefficient of reproducibility is:

$$R = 1 - \frac{\text{no. of deviations}}{((\text{no. of rows})(\text{no. of columns})) - \text{no. of empty cells}}$$

For the spring sample, the formula would be: $R = 1 - \frac{7}{(9x5)-4} = .829$

[2] Pica (1983a) and others use the term "overapplications" to cover both what they call "over-uses" (use of a morpheme where no morpheme is required) and "overgeneralizations" (use of a morpheme where a different morpheme is required). However, since the term "overgeneralizations" has traditionally been used to cover both situations, I will continue this use of the term here.

[3] Patterns for use of copula, past irregular, past regular, and third singular -s come from Table 1. Where there are no percentages in Table 1 fractions are given in Figure 5.

[4] There are also many instances of overgeneralizations of be to inappropriate contexts. Overgeneralizations of all of the morphemes in this study are discussed in Kreeft, 1984.

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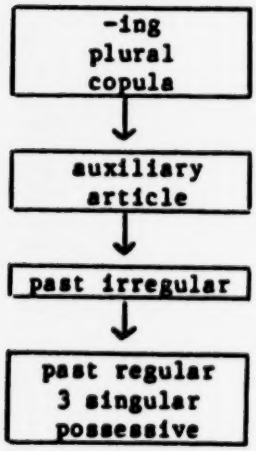


Figure 1. Krashen's "natural order" (1977, p. 149).

Student	Country of Birth	First/Home Language	Length of Time in U.S. Schools at Beginning of Journal School Year
1980-81 Classroom:			
Michael	Burma	Burmese	8 months (arrived in U.S. 1-80)
Laura	Italy	Italian	5 months (arrived 4-80)
Su Kyong	Korea	Korean	0 months (arrived 10-80)
U Chal	Korea	Korean	6 months (arrived 3-80)
1981-82 Classroom:			
Andy	Korea	Korean	3 months (arrived 5-81)

Figure 2. Students in the study.

Table 1. Individual and group accuracy percentages on nine morphemes.

Morphemes	U Chal	Laura	Su Kyong	Michael	Andy	Group Score	Group Mean
Fall							
ing	1/12 8.3	— —	12/13 92.3	8/10 80.0	— —	21/35 60.0	60.2
cop	18/18 100	18/20 90.0	17/23 73.9	34/36 94.4	88/85 97.8	131/182 92.3	91.2
aux	1/12 8.3	— —	8/13 61.5	6/10 60.0	— —	15/35 42.9	43.3
arts	59/68 86.8	8/23 34.8	13/20 65.0	43/51 84.3	28/35 68.6	187/197 74.6	67.9
plu	18/28 64.3	10/11 90.9	4/8 50.0	11/17 64.7	19/27 70.4	62/91 68.1	68.1
past irr	2/10 20.0	— —	2/12 16.7	13/51 25.4	3/33 9.1	20/106 18.9	17.8
possess	— —	— —	— —	0/7 0.0	0/5 0.0	0/12 0.0	0.0
3 sing	0/28 0.0	1/9 11.1	— —	3/14 21.4	— —	4/51 7.8	10.8
past reg	2/10 20.0	— —	0/10 0.0	6/28 21.4	0/10 0.0	8/58 13.8	10.4
Winter							
ing	17/17 100	21/21 100	20/20 100	26/26 100	21/22 95.5	105/106 99.1	99.1
cop	21/21 100	48/50 96.0	21/26 80.8	59/64 92.2	202/212 95.3	351/373 94.1	92.9
aux	16/17 94.1	21/21 100	13/20 65.0	24/26 92.3	12/22 54.5	86/106 81.1	81.2
arts	88/95 92.6	57/57 100	22/39 56.4	132/188 91.7	21/103 20.4	320/438 73.1	72.2
plu	19/29 65.5	9/14 64.3	6/12 50.0	17/44 38.6	33/71 46.5	84/170 49.4	53.0
past irr	27/36 75.0	15/17 88.2	7/18 38.9	24/47 51.1	9/84 10.7	82/202 40.6	52.8
possess	— —	— —	— —	1/12 8.0	12/21 57.1	13/33 39.4	32.6
3 sing	2/14 14.3	1/24 4.2	0/6 0.0	1/24 4.2	— —	4/68 5.9	5.7
past reg	4/10 40.0	4/10 40.0	0/10 0.0	1/14 7.1	1/20 5.0	10/64 15.6	18.4
Spring							
ing	11/11 100	38/38 100	10/10 100	31/31 100	11/11 100	101/101 100	100
cop	26/16 100	54/54 100	33/35 94.3	89/93 95.7	149/153 97.4	351/361 97.2	97.5
aux	11/11 100	38/38 100	4/10 40.0	26/31 83.9	4/11 36.4	83/101 82.2	72.1
arts	64/65 98.5	89/89 100	28/35 80.0	131/172 76.2	33/73 45.2	305/394 77.4	80.0
plu	21/26 80.8	27/38 71.1	4/8 50.0	19/43 44.2	15/27 55.6	86/142 60.6	60.3
past irr	35/35 100	32/34 94.1	8/25 32.0	45/70 64.3	21/90 23.3	141/254 55.5	62.7
possess	3/6 50.0	2/6 33.3	— —	0/13 0.0	14/17 82.4	19/42 45.2	41.8
3 sing	6/20 30.0	3/14 21.4	— —	1/28 3.6	0/15 0.0	10/77 13.0	13.8
past reg	2/11 18.2	— —	— —	3/17 17.6	0/23 0.0	5/51 9.8	11.9

Fall	Winter	Spring
cop	ing	ing
arts	cop	cop
plu	aux	aux
ing	arts	arts
aux	plu	plu
past irr	past irr	past irr
past reg	possess	possess
3 sing	past reg	3 sing
possess	3 sing	past reg

Table 2. Group rank orders for morpheme suppliance by Group Score.

	Correlation coefficient	Significance level
Fall and Winter	0.75	$p < .05$
Fall and Spring	0.77	$p < .05$
Winter and Spring	0.98	$p < .001$

Table 3. Spearman rho correlations between morpheme ranks for three times during the year.

BSM-elicited[1]		Free speech[2]		Uncorrected transcripts[3]		Corrected transcripts[3]		"Natural order"[4]	Dialogue journals	
cop	84	cop	87	ing	97	cop	98	ing	ing	100
ing	83.7	ing	84	cop	97	ing	97	plu	cop	97.2
plu	79	plu	71	past irr	84	past irr	87	cop	aux	82.2
art	79	art	69	aux	82	aux	86	aux	art	77.4
aux	69	past irr	67	art	82	art	83	art	plu	60.6
past irr	54	past reg	64	possess	75	possess	80	past irr	past irr	55.5
3 sing	41	aux	56	plu	75	plu	80	past reg	possess	45.2
		3 sing	36	past reg	61	3 sing	76	3 sing	3 sing	13.0
				3 sing	60	past reg	61	possess	past reg	9.8

1. Bailey, Madden & Krashen, 1974. Reported in Krashen et al., 1977. p. 340.
2. Krashen, Houck, Giunchi, Bode, Birnbaum & Strei, 1977, p. 340.
3. Houck, Robertson & Krashen, 1978, p. 337.
4. Krashen, 1977, p. 149.

Table 4. Morpheme rank orders in oral and written productions.

Study	Elicitation Method	Rank order correlation
Bailey, et al. 1974	BSM	0.82[b]
Krashen, et al. 1977	Free speech	0.68[c]
Krashen, et al. 1978	Uncorrected transcripts	0.89[a]
Krashen, et al. 1978	Corrected transcripts	0.87[a]
Krashen's "natural order"	----------	0.83[a]

a. $p<.01$, $n=9$

b. $p<.05$, $n=7$

c. $p=.06$, $n=8$

Table 5. Spearman rho correlations of dialogue journal writing with other studies of oral and written productions.

Mean		U Chal	Laura	Su Kyong	Michael	Andy
Fall						
cop	91.2	100	90.0	73.9	94.4	97.8
arts	67.9	86.8	34.8	65.0	84.3	68.6
plu	69.1	64.3	(90.9)	50.0	64.7	(76.5)
ing	60.2	8.3	--	(92.3)	(80.0)	--
aux	43.3	8.3	--	(61.5)	60.0	--
past irr	17.8	(20.0)	--	16.7	25.4	9.1
3 sing	10.8	0.0	--	--	21.4	--
past reg	10.4	(20.0)	--	0.0	21.4	0.0
possess	0.0	--	--	--	0.0	0.0
Winter						
ing	99.1	100	100	100	100	95.5
cop	92.9	100	(96.0)	80.8	92.2	95.3
aux	81.2	94.1	100	65.5	92.3	54.5
arts	72.2	92.6	100	56.4	91.7	20.4
past irr	52.8	75.0	88.2	38.9	51.1	10.7
plu	54.2	65.5	64.3	(50.0)	38.6	(52.5)
possess	32.6	--	--	--	8.0	(57.1)
past reg	18.4	40.0	40.0	0.0	4.2	--
3 sing	5.7	14.3	4.2	0.0	(7.1)	5.0
Spring						
ing	100	100	100	100	100	100
cop	97.5	100	100	94.3	95.7	97.4
arts	80.0	(98.5)	100	80.0	76.2	45.2
aux	72.1	100	100	40.0	(83.9)	36.4
past irr	62.7	100	94.1	32.0	64.3	23.3
plu	60.3	80.8	71.1	(50.0)	44.2	(55.6)
possess	41.4	50.0	33.3	--	0.0	(82.4)
3 sing	13.8	30.0	21.4	--	(3.6)	0.0
past reg	11.9	18.2	--	--	(17.6)	0.0

Table 6. Implicational scales for morpheme accuracy orders. Based on the group mean.

Definite Article	Fall		Winter		Spring	
U Chal	50/57	87.7	69/75	92.0	51/52	98.1
Laura	6/10	60.0	40/40	100	35/35	100
Su Kyong	8/12	66.7	21/31	66.7	22/27	81.5
Michael	39/43	90.7	120/130	92.3	102/129	79.1
Andy	14/22	63.6	18/71	25.4	26/48	54.2
TOTAL	117/144	81.3	268/347	77.2	236/291	81.1
Indefinite Article						
U Chal	4/11	36.3	17/20	85.0	13/13	100
Laura	0/13	0.0	16/17	94.1	14/14	100
Su Kyong	0/8	.0	0/8	0.0	3/8	37.5
Michael	3/8	37.5	0/14	0.0	16/43	37.2
Andy	7/14	50.0	2/32	6.3	7/25	28.0
TOTAL	11/54	20.4	35/91	38.5	53/103	51.5

Table 7. Use of definite and indefinite articles in obligatory contexts.

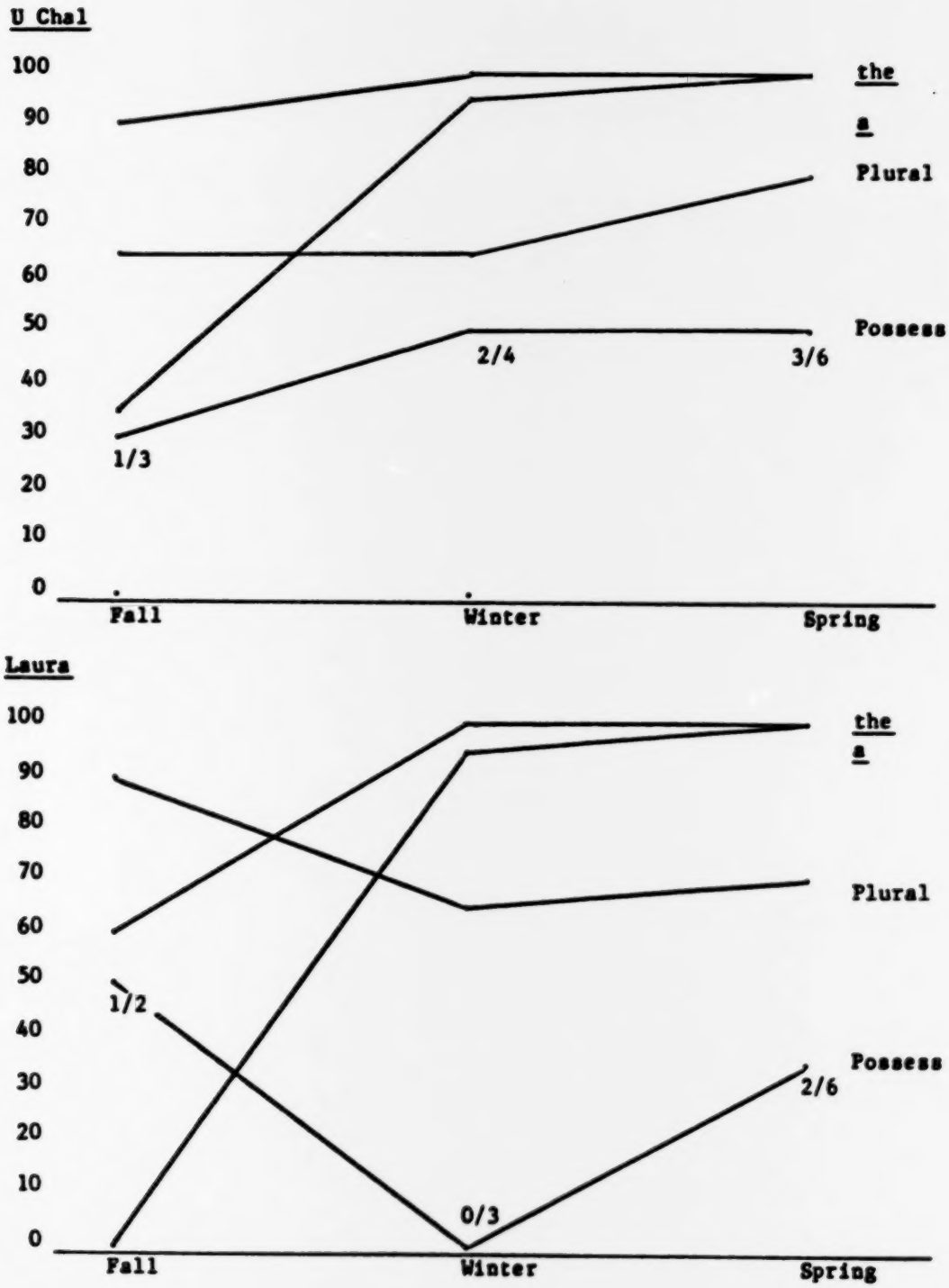


Figure 3. Change over time in suppliance of noun-related morphemes in obligatory contexts. Individual students.

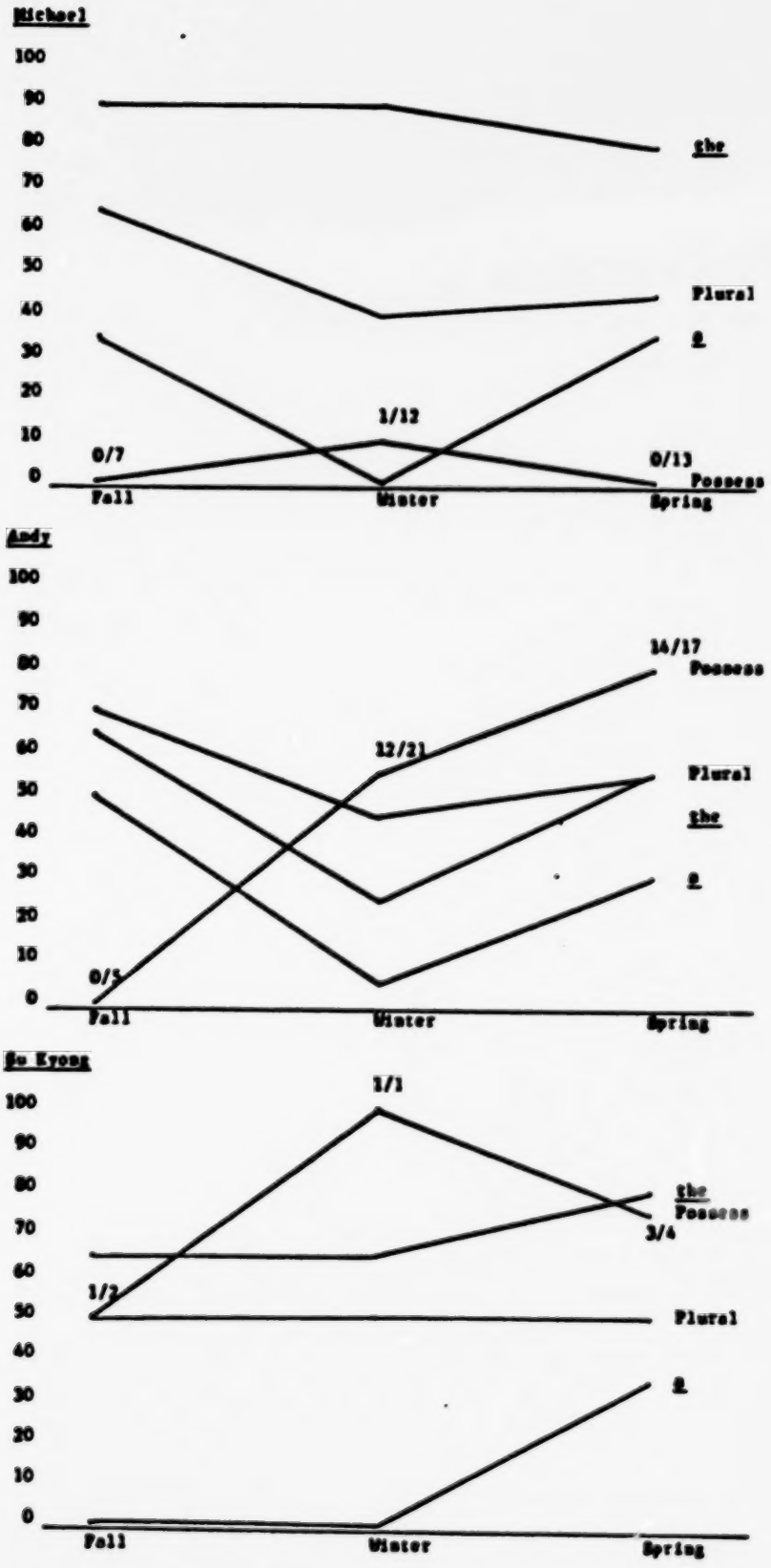
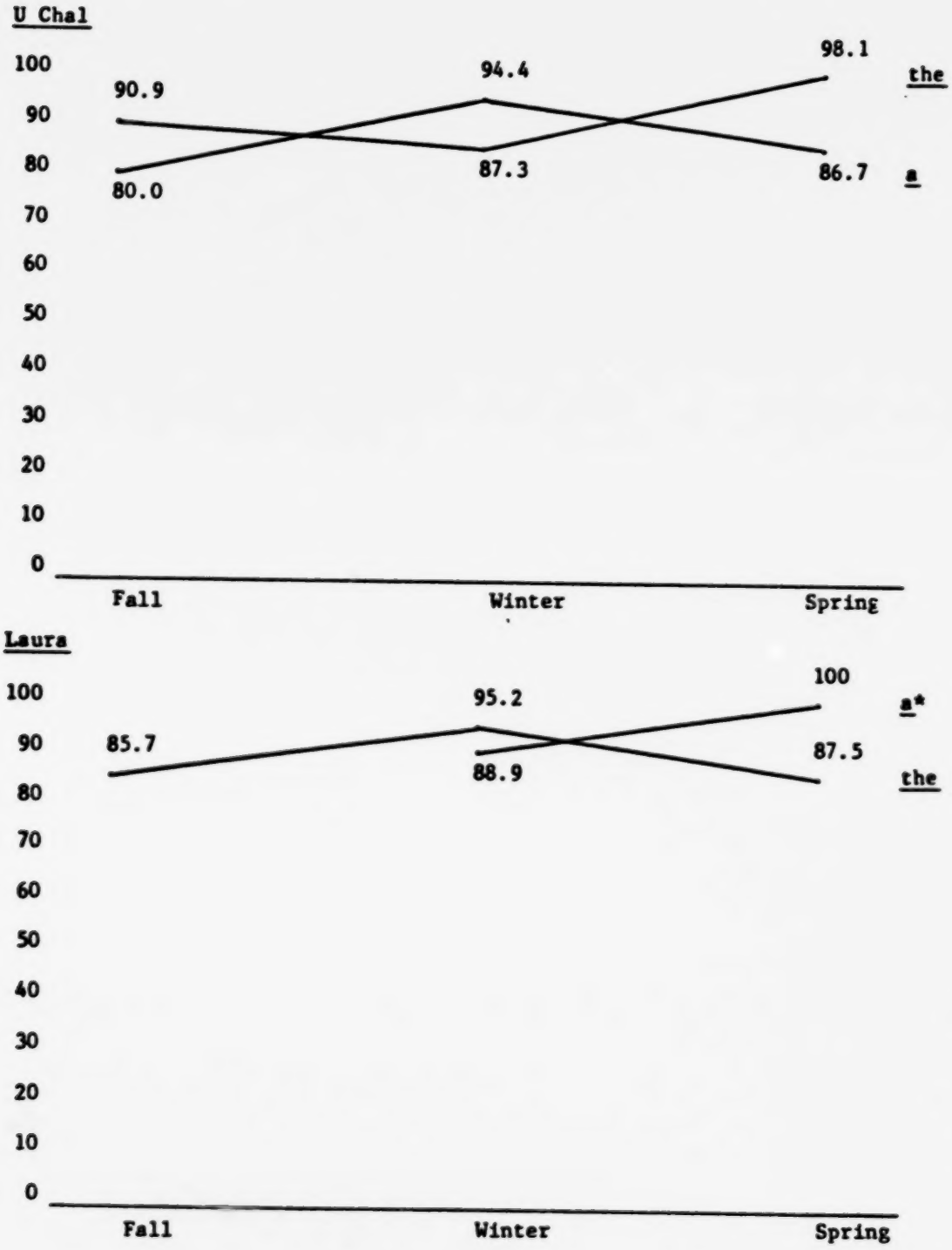


Figure 3, cont.



* There were no contexts for the use of a for Laura in the fall and SuKyong in the winter samples.

Figure 4. Appropriate use of definite and indefinite articles.

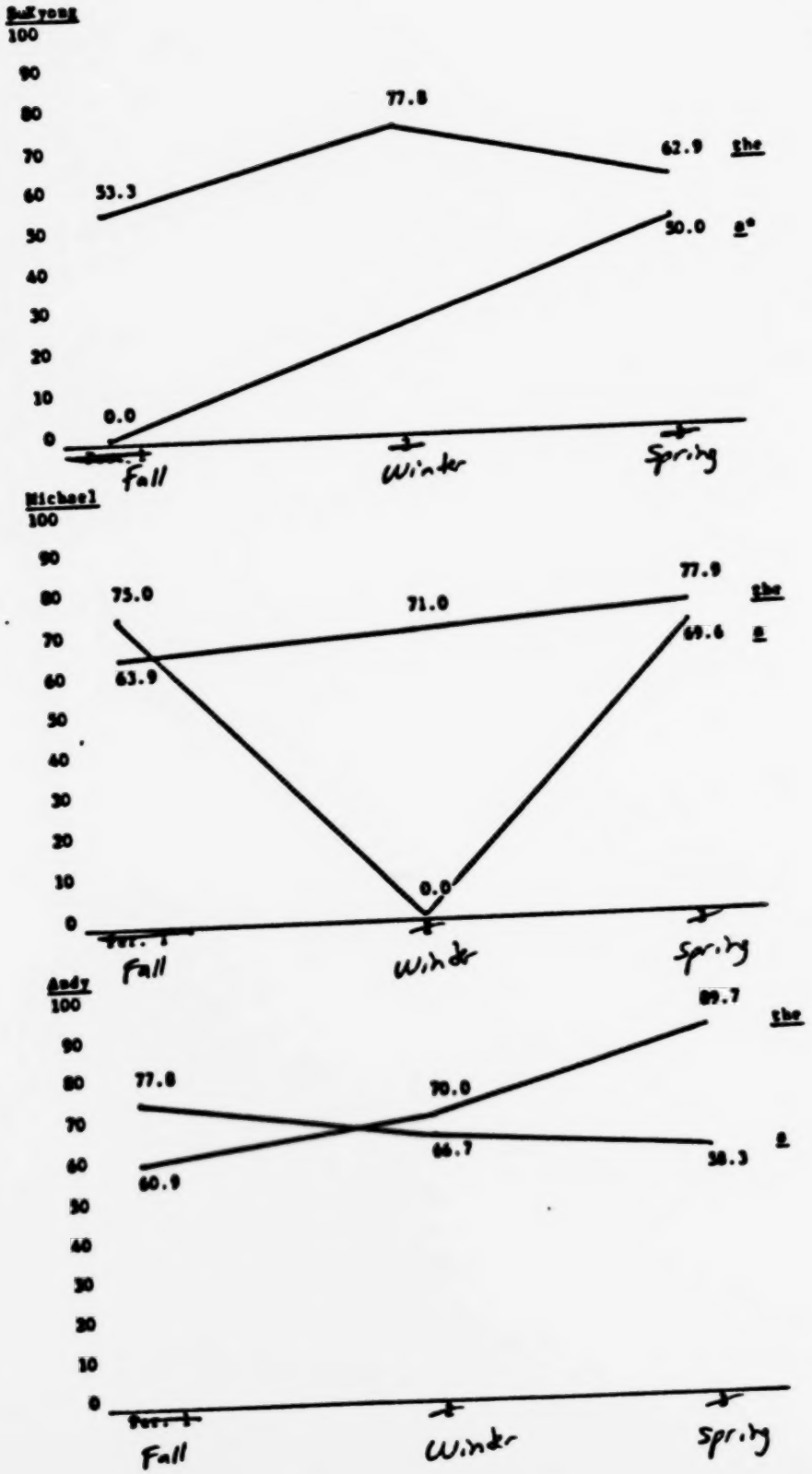
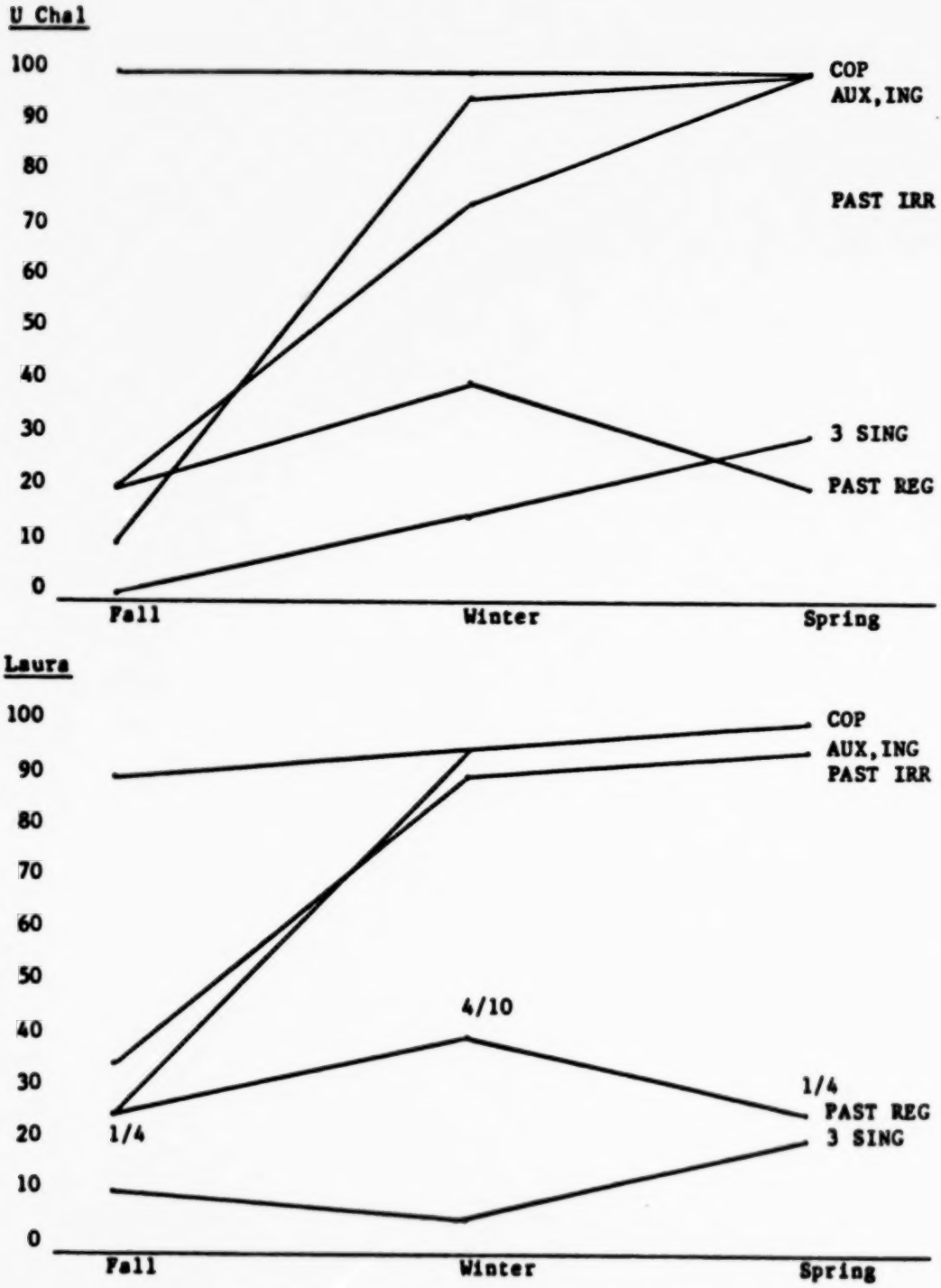


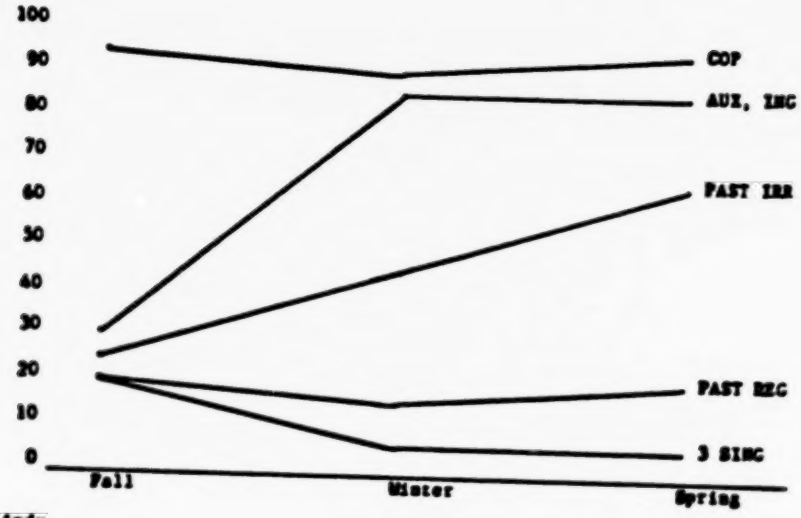
Figure 4, cont.



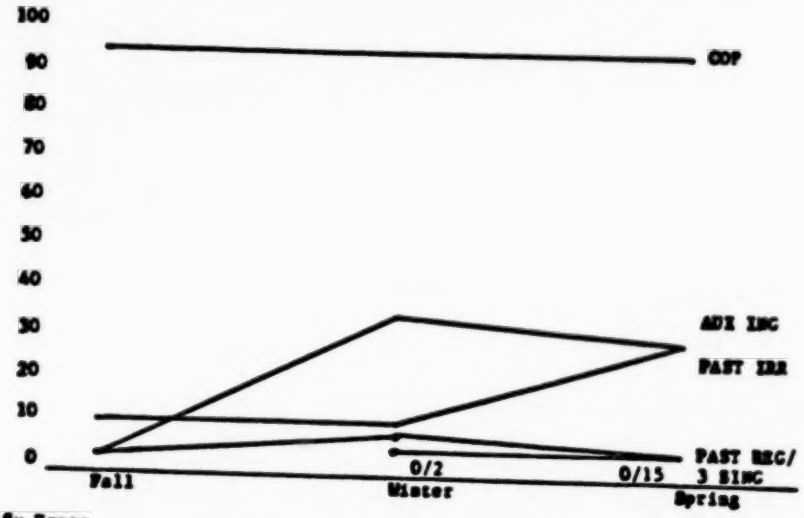
* There are not contexts for use of third singular -s in SuKyong's journal in the fall and winter samples.

Figure 5. Change over time in suppliance of verb-related morphemes.

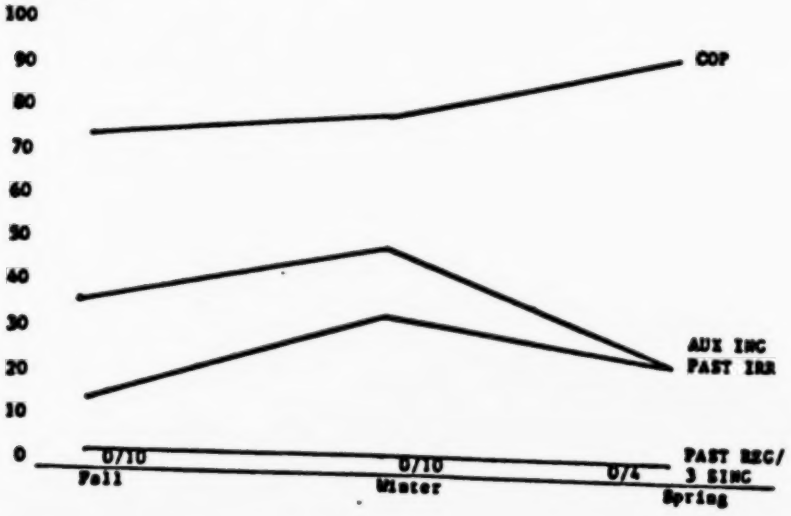
Michael



Andy



Su Kyong



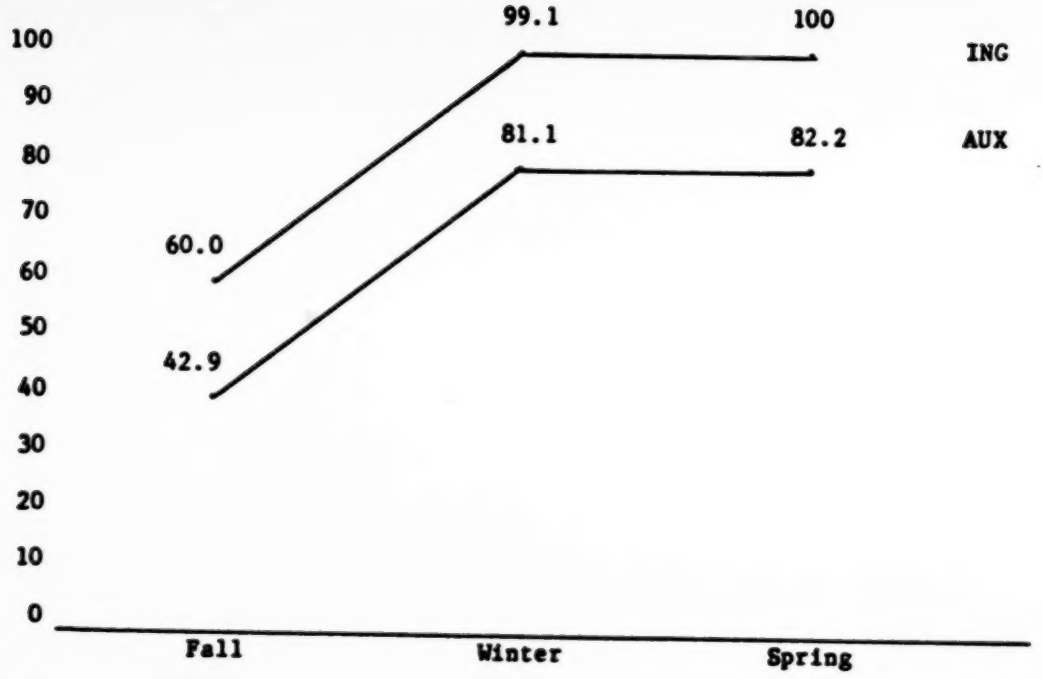


Figure 6. Progressive morphemes, group scores. Ambiguous constructions excluded.

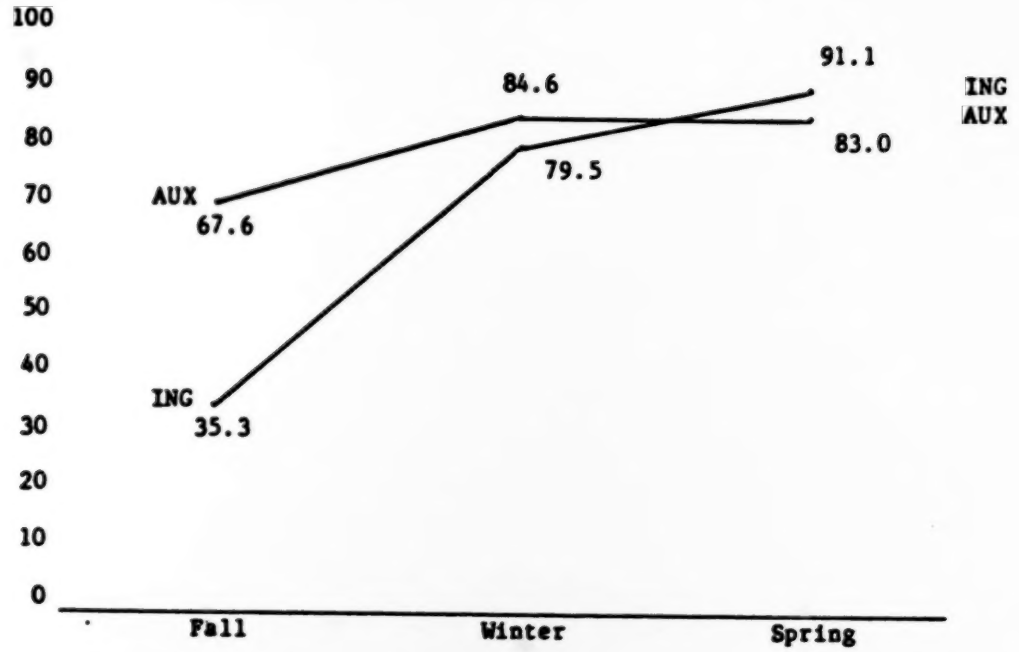
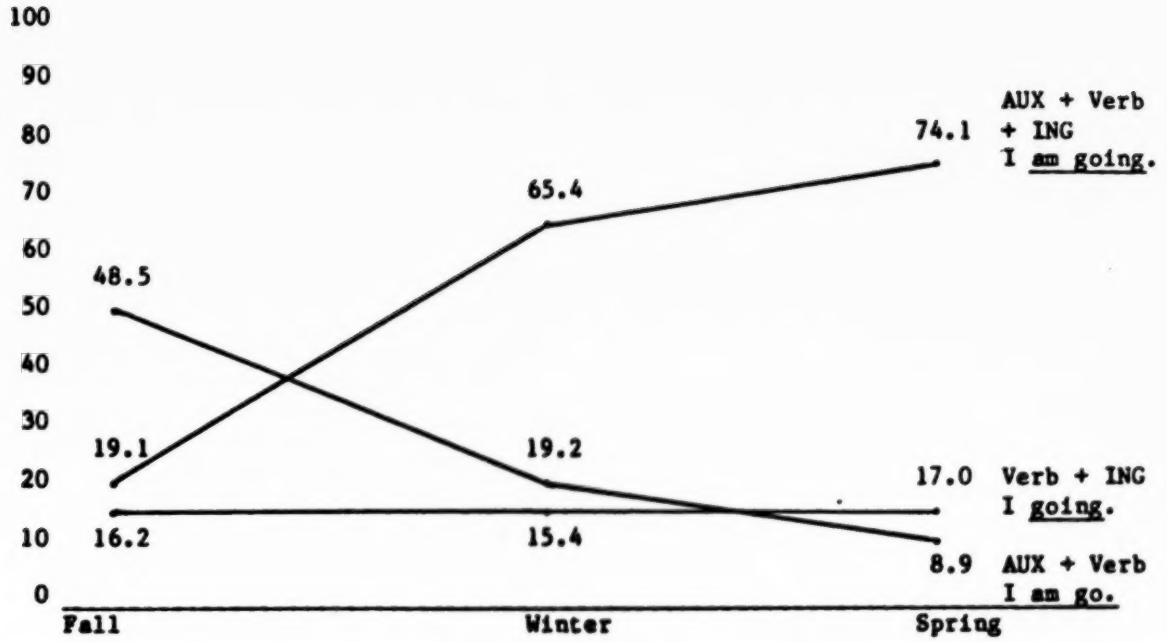


Figure 7. Progressive morphemes, group scores. Ambiguous constructions included.



* The percentages in the fall samples do not equal 100%. Here U Chal's use of the verb alone (I go to do...) made up 16% of the progressive constructions.

Figure 8. Constructions used to expressive the progressive.